AMENDMENTS TO THE CLAIMS

Pursuant to 37 C.F.R. § 1.121 the following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

1. (Withdrawn) A device for arterialization of the portal vein comprising at least two catheters and connection means between said two catheters.

2. (Withdrawn) The device as claimed in claim 1, wherein said connection means comprise a three-way connection.

3. (Withdrawn) The device as claimed in claim 1, wherein said three-way connection comprises a tap.

4. (Withdrawn) The device as claimed in claim 2, wherein said three-way connection comprises elements , each of which is suitable to produce coupling of said three-way connection with the respective catheter.

5. (Withdrawn) The device as claimed in claim 1, wherein said catheters are heparinized and radiopaque.

6. (Withdrawn) A kit for application to the body of a patient of a device as claimed in claim 1; the kit comprising:
(i) two radiopaque and heparinized catheters;
(ii) two metal guides to insert said catheters into the body;
(iii) two syringes each having a respective needle;

(iv) two feed devices to move said guides forward inside the body;
(v) a three-way connection; and
(vi) a syringe.

7. (Withdrawn) The kit as claimed in claim 6, wherein there are various needles having different dimensions according to the system chosen for insertion of said catheter.

8. (Withdrawn) The kit as claimed in claim 7, wherein the dimensions of said needle vary from 15 cm to 30 cm.

9. (Withdrawn) Use of a kit for application to the body of a patient of a device as claimed in claim 1; said kit comprising:
(i) two radiopaque and heparinized catheters ;
(ii) two metal guides to insert said catheters into a body;
(iii) two syringes each having a respective needle;
(iv) two feed devices to move said guides forward inside the body;
(v) a three-way connection; and
(vi) a syringe.

10. (Withdrawn) A pack comprising at least a kit as claimed in claim 6.

11. (Currently Amended) A machine for regeneration of a human liver~~; machine~~ comprising:
at least two catheters[[,]];
an extracorporeal circuit ~~designed~~ configured to connect first and second catheters of the at least two catheters with ~~and~~ at least an oxygenation device connected to said extracorporeal circuit[[,]];
said oxygenation device being suitable to introduce oxygen into blood in extracorporeal circulation in said circuit;

a control device configured to provide feedback control so as to regulate a quantity of oxygen provided to the oxygenation device; and

the control device further configured to measure hematocrit and a partial pressure of molecular oxygen in the blood in extracorporeal circulation.

12. (Canceled).

13. (Currently Amended) The machine as claimed in claim ~~12~~ 11, wherein there are also means for hemofiltration of the blood in extracorporeal circulation.

14. (Canceled).

15. (Previously Presented) The machine as claimed in claim 11, wherein there are also means designed to heat the blood in extracorporeal circulation.

16. (Previously Presented) The machine as claimed in claim 11, wherein there are also means designed to introduce anticoagulating substances into the blood in extracorporeal circulation.

17. (Previously Presented) The machine as claimed in claim 11, wherein there are also means to detect and eliminate any air bubbles present in the blood in extracorporeal circulation.

18. (Withdrawn) A process for regeneration of a human liver, process characterized in that oxygenated blood is sent to said liver.

19. (Withdrawn) The process as claimed in claim 18, wherein the oxygenated blood undergoes a further hemofiltration process.

20. (Withdrawn) The process as claimed in claim 18, wherein said oxygenated blood is sent to the portal vein.

21. (Withdrawn) The process as claimed in claim 18, wherein said oxygenated blood is arterial blood taken from the body of the patient and channeled towards the liver of the patient.

22. (Withdrawn) A process for regeneration of a human liver; process comprising the following phases:
(a1) filling a syringe, provided with a needle, with a saline solution; after inserting the needle into the right jugular vein of the patient, aspiration is performed with the syringe until venous blood is visible;
(a2) detaching the body of the syringe and inserting a metal guide into the lumen of the needle ; making the metal guide slide, utilizing in this operation a device ;
(a3) making the metal guide move through the inferior vena cava, the right suprahepatic vein and the portal vein; the metal guide being blocked with one of its ends at the portal vein;
(a4) removing the needle by sliding it towards the outside on the metal guide;
(a5) inserting the metal guide into a first catheter and making the latter slide on the metal guide until one end of the first catheter reaches the portal vein; as the first catheter is radiopaque, it is possible to constantly monitor its route through the body of the patient using radiological observation;
(a6) removing the metal guide from the first catheter;
(a7) connecting the first catheter to a three-way connection, suitably positioning a respective tap ;
(a8) connecting the three-way connection to a syringe and aspirating the blood to confirm that it is effectively portal blood; and
(a9) inserting a second catheter into the femoral artery with the system described in the previous phases and connecting it with the three-way connection.

23. (Withdrawn) A process for regeneration of a human liver; process comprising the following phases:
(a1) piercing the skin and hepatic parenchyma with a needle until portal blood of the patient is aspirated by means of a syringe;

(a2) detaching the body of the syringe and inserting a metal guide into the lumen of the needle ; making the metal guide slide utilizing in this operation a device;

(a3) blocking the metal guide with one of its ends at the portal vein;

(a4) removing the needle by sliding it towards the outside on the metal guide;

(a5) inserting the metal guide into a first catheter and making the latter slide on the metal guide until one end of the first catheter reaches the portal vein; as the first catheter is radiopaque, it is possible to constantly monitor its route through the body of the patient using radiological observation;

(a6) removing the metal guide from the first catheter;

(a7) connecting the first catheter to a three-way connection, suitably positioning a respective tap;

(a8) connecting the three-way connection to a syringe and aspirating the blood to confirm that it is effectively portal blood; and

(a9) inserting a second catheter in the femoral artery with the system described in the previous phases and connecting it with the three-way connection.